

BEKHTEREVA, M. N.

"Acetone-Butyl Alcohol Fermentation on Molasses," Mikrobiol. 8, No. 1, 1939.

Cent. Sci. Res. Lab. Fermentation Ind.

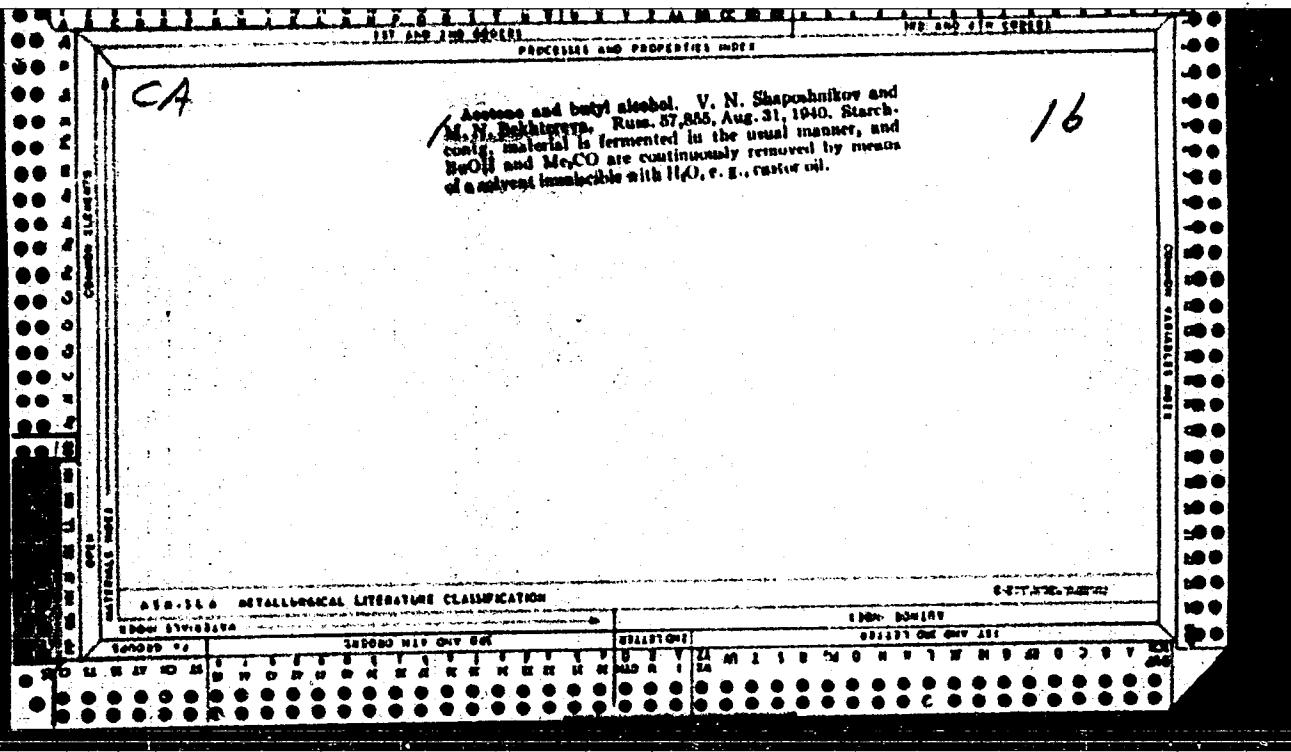
101 AND 102 00283
PROCESSES AND PROPERTIES INDEX

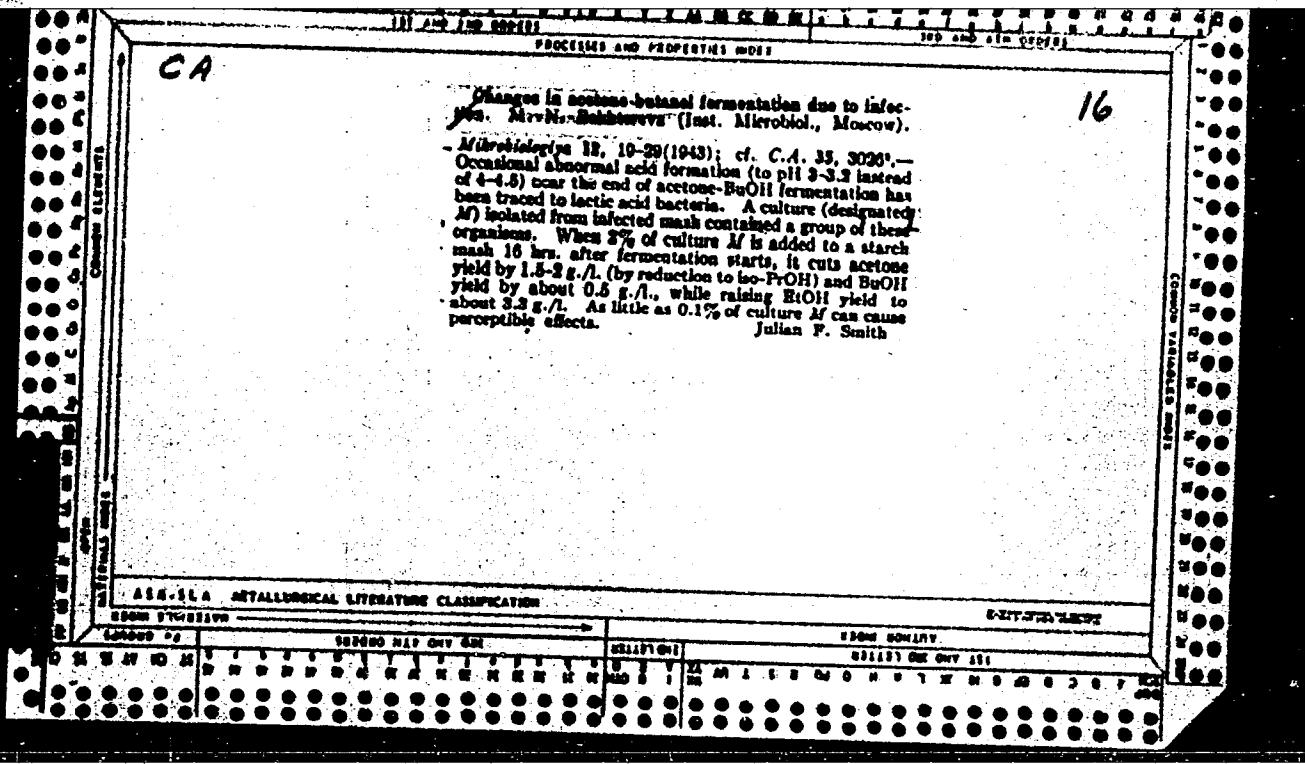
16

CA

Acetone-butyl alcohol fermentation under continuous removal of the formed products by extraction. M. N. Shaposhnikov. Metallurgy (U. S. S. R.) 8, 851 (in English, 1952) (1950); cf. C. A. 43, 370. To det. the effect of BuOH on the fermenting process and on the development of *Clostridium acetobutylicum*, in connection with the problem of fermenting cood. mash, the exp. removal of neutral products from the substrate during fermentation was tried. Continuous extrn. with castor oil (cf. Shaposhnikov, C. A. 27, 5408) was employed. This oil exits. from the wort acetone 13-16, EtOH 5-20 and BuOH 50-68%. By adding the oil to the medium in varying amts. depending on the carbohydrate content, it is possible to ferment corn mash of 3-8 times the usual concn. The yield of acetone was 20-37 g. per l. of wort, that of all neutral products 00-100 g. per l. Their concn. in the wort under the oil layer was usually lower than in control vessels, e. g., total products 1.4-2.3%, BuOH 0.4% against 1.2-1.3% in usual fermentation. The extrn. is beneficial to the development of the bacteria. T. L.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION										8-27 3PC-123452									
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--- BEKhtEREVA, M. N.

USSR/Microbiology - General Microbiology

F-1

Abs Jour : Referat Zhurn - Biol. No 16, 25 Aug 1957, 68357

Author : Krasilnikov, N.A., Bekhtereva, M.N.

Title : The Application of a Method of Fluorescent Microscopy
for Identification of Live and Dead Actinomycete Cells.

Orig Pub : Mikrobiologiya, 1956, 25, No 3, 279-285

Abstract : Of the 15 species of actinomycetes investigated, belonging to 7 different groups, the brightest natural (primary) luminescence belonged to Actinomyces violaceus, A. aureofaciens and actinomycetes of the orange-red group. Fluorochroming by acridin orange (AO) does not permit any differentiation of a live mycelium of actinomycetes from a dead one; the color of luminescence depends on the concentration of the coloring agent, quantity of mycelium and other factors. AO is quite toxic to actinomycetes; in concentration of 1:10,000 it causes destruction of 95% of the culture. For differentiation of live from

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USSR/Microbiology - General Microbiology

F-1

Abs Jour : Referat Zhurn - Biol. No 16, 25 Aug 1957, 68357

dead mycelium of actinomycetes, a fluorochroming by
primulin was found useful, as suggested for other
substances.

Card 2/2

- 5 -

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7

KOBENYAKO, A.I.; KUCHIEVA, A.G.; SKRYABIN, G.K.; BEKTEREVA, M.N.; NIKITINA, N.I.;
ARTAMONOVA, O.I.

New antibiotics. Vest. AN SSSR 26 no.6:95-96 Je '56. (MIRA 9:9)
(ANTIBIOTICS)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7"

BEKHTERIWA, N.N.; KOSHELEVA, N.A.; KHRZHANOVSKAYA, V.E.

Formation of active proteolytic enzymes as related to the growth and
autolysis of submerged Actinomyces cultures [with summary in English].
Mikrobiologija 27 no.1:32-38 Ja-F '58. (MIRA 11:4)

1. Institut mikrobiologii AN SSSR, Moskva.
(ACTINOMYCES, metab.
protease form., relation to growth & autolysis in
submerged cultures (Eng))
(PROTEASES
in Actinomyces in submerged cultures, relation to
growth & autolysis (Eng))

~~REKHTEREVA, M.N.~~

Paper chromatographic determination of amino acids in *Actinomyces violaceus* No.719 [with summary in English]. *Mikrobiologija* (MIRA 11:12)
27 no.5:560-564 S-0 '58

1. Institut mikrobiologii AN SSSR.

(*ACTINOMYCES*, metab.

amino acids in *Actionmyces, violaceus*, paper chromatography (Rus))

(*AMINO, ACIDS*, metab.

Actinomyces violaceus, paper chromatography(Rus))

17(4,12)

AUTHORS:

Shaposhnikov, V. N., Academician, Bekhtereva, SOV/20-124-1-57/69
M. N., Kosheleva, N. A., Khrzhanovskaya, V. E.

TITLE:

The Possibility of Controlling the Process of Antibiotic Formation in Actinomyces Violaceus (Vozmozhnost' regulirovaniya protsesessa obrazovaniya antibiotika u Actinomyces violaceus)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 1,
pp 198 - 201 (USSR)

ABSTRACT:

Two stages of the process of fermentation were detected (Refs 1,2). The products of fermentation are mostly formed at different periods in the course of development of the culture. They are very rapidly formed during the second stage when the culture stops growing. It is not possible to completely identify the 2 stages in the formation of antibiotics with the regularities of bacterial processes. Antibiotics differ greatly from bacterial processes and their structure is very complicated. Their characteristic features are given. It was observed that an intensive formation of antibiotics often coincides with the moment of exhaustion of one or the other element in the culture medium. In this connection intermediary

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The Possibility of Controlling the Process of Antibiotic SOV/2o-124-1-57/69
Formation in *Actinomyces Violaceus*

products can be formed as well as products of autolytic decomposition. The mentioned products serve as a source for the formation of single molecule particles of antibiotics. From this aspect the method of exchanging culture media during fermentation gains particular importance for the problem mentioned in the title. So far the authors have found that the development of the *Act. violaceus* Nr 719 really represents a 2-phase process. (Figs 1:2). The most intensive formation of the antibiotic takes place during a rapid decrease of growth of the culture. Morphological changes of the culture of the *Act. violaceus* can be observed which are doubtlessly a result of the change of its physiological state with increasing age. As the calculation of the productivity of the culture on the basis of an uninterruptedly changing medium does not result in a correct comparative estimation of the biochemical activity of the mycelium, special experiments were carried out. The normally bred mycelium was put into small flasks for a time of 6-8 hours. The amount of mycelium did not exceed 0.5 g/100 ml. The initial pH-value 7 was maintained (Fig 3). In the course of this experiment it was

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The Possibility of Controlling the Process of Antibiotic SOV/20-124-1-57/69
Formation in *Actinomyces violaceus*

proved that a young mycelium (42 hours old) is not yet able to form an antibiotic. Only later, e.g. after 72 hours the rate of production of antibiotic was of 4500 relative units per 1 g mycelium hour. The substitution for the hitherto used medium Nr 1 by other sorts of media accelerated fermentation and development of the culture. This is why the most productive age varied somewhat. In order to find out whether a young mycelium is ready for the formation of the antibiotic a young and an older mycelium were put into media with different pH-values during fermentation. It was thus proved that the pH-values from 6 to 8 do not cause a young mycelium to produce an antibiotic. In the old mycelium the production remained unchanged between 5.8 and 8.8. The elimination of nitrogen from the culture medium led, however, to an increased production of the antibiotic, even in the case of a young mycelium. The increase was up to 117 relative units. This process was accompanied by clear changes in the structure of the cytoplasm. There are 3 figures, 1 table and 3 Soviet references.

Card 3/4

The Possibility of Controlling the Process of Antibiotic SOV/20-124-1-57/69
Formation in *Actinomyces Violaceus*

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of
Microbiology, Academy of Sciences, USSR)

SUBMITTED: September 13, 1958

Card 4/4

17(2,12)
AUTHORS:

SOV/20-127-5-50/58

Bekhtereva, M. N., Kolesnikova, I. G.

TITLE:

The Continuous Process of Fermentation of Actinomyces
lavendulae in a Running Medium

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 5, pp 1114-1116
(USSR)

ABSTRACT:

The problem of breeding Actinomycetes under the conditions mentioned in the title is new and scarcely treated in the publications (Refs 1-3). The mentioned method of breeding may open prospects of a new technology if it is correctly utilized and lead to a considerable financial success. The authors used the strain Nr 2335 of the fungus species mentioned in the title as object. The formation of the antibiotic of this species is closely connected with the period of intensive growth as well as with the end of the latter. According to the composition of the culture medium the process may have 1 stage or approach towards a two-stage process. The experiment was carried out under laboratory conditions in a vitreous apparatus cultivator according to a one stage scheme. A continuous inflow of the culture medium took place. Staphylococcus Nr 209 served as ex-

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The Continuous Process of Fermentation of Actinomyces lavendulae in a Running Medium SOV/20-127-5-50/58

experimental object for the antibiotic. A high quality culture medium was used: (Nr 1): soluble starch 1.5%; glucose 1%; $(\text{NH}_4)_2\text{SO}_4$ 0.35%; NaCl 0.5%; corn extract 1% with pH 7.0.

Table 1 shows the change of the biomass quantity, of the antibiotic activity, the carbohydrates, and the pH-value of the culture medium flowing from the cultivator. From the results may be concluded that more hyphae with differentiated plasma or enlarged hyphae were produced when the culture medium flow decelerated, i.e. the culture aged. pH = 5.5 led to the occurrence of inflated yeast-like hyphae. The antibiotic is intensively produced if the breeding in a running medium takes a long time. A number of important problems which are to be solved by further investigations remains unclear, e.g. the optimum concentration of the substances in the culture medium as well as the necessary rate of flow of the culture medium. There are 1 table and 3 references, 1 of which is Soviet.

ASSOCIATION: Institut mikrobiologii Akademii nauk SSSR (Institute of Microbiology of the Academy of Sciences, USSR)

Card 2/3

BEKHTEREVA, M.N.; KOSHELEVA, N.A.; KHRZHANOVSKAYA, V.E.

Physiological properties of *Actinomyces lavendulae* as related to
cultural conditions. Trudy Inst. mikrobiol. no. 6:234-244 '59.
(MIRA 13:10)

1. Institut mikrobiologii AN SSSR.
(*ACTINOMYCES LAVENDULAE*)

BEKHTEKEVA, M.N.

Oxidation of organic acids by a culture of *Actinomyces violaceus*
strain 719. Mikrobiologija 29 no.2:184-189 Mr-Ap '60. (MIRA 14:7)

1. Institut mikrobiologii AN SSSR.
(ACTINOMYCES) (ACIDS, ORGANIC)
(OXIDATION, PHYSIOLOGICAL)

BEKHTEREVA, M.N.

Pathways of organic acid synthesis and conversion in *Actinomyces violaceus*. *Mikrobiologija* 29 no.3:329-335 My-Je '60. (MIRA 13:7)

1. Institut mikrobiologii AN SSSR.
(ACTINOMYCES) (ACIDS, ORGANIC)

BEKTEREVA, M.N.

Oxidation of glucose by the culture of *Actinomyces violaceus*, strain
719. *Mikrobiologija* 29 no.5:643-648 840 '60. (MIRA 13:11)

1. Institut mikrobiologii AN SSSR.
(GLUCOSE) (ACTINOMYCES)

(OXIDATION, PHYSIOLOGICAL)

BEKTEREVA, M.N.

Oxidation and conversion of glutamic acid by *Actinomyces violaceus*.
Mikrobiologija 29 no.6:802-805 N-D '60. (MIRA 14;1)

1. Institut mikrobiologii AN SSSR,
(ACTINOMYCES) (GLUTAMIC ACID)

BEKHTEREVA, M. N., (USSR)

"Formation and Conversion of some Organic Compounds
in the Metabolism of *Actinomyces violaceus*."

Report presented at the 5th Int'l. Biochemistry Congress,
Moscow, 10-16 Aug 1961.

BEKTEREVA, M. N.; KOLESNIKOVA, I. G.

Morphological characteristics of the actinomycetes *Act. lavendulae*
and *Act. aureofaciens* after a prolonged cultivation of them on a
flowing medium. *Mikrobiologija* 30 no.3:402-408 My-Je '61.
(MIRA 15:7)

1. Institut mikrobiologii AN SSSR.

(ACTINOMYCES)

SHAPOSHNIKOV, V.N.; BEKHTEREVA, M.N.; KHRZANOVSKAYA, V.E.

Keto acid formation in submerged cultures of *Actinomyces violaceus* 719. *Mikrobiologija* 32 no.6:946-953 N-D '63
(MIRA 18:1)

1. Institut mikrobiologii AN SSSR.

SHAPOSHNIKOV, V.N., akademik; BEKTEREVA, M.N.; YAKUBOV, G.Z.;
KHOKHLOVA, Yu.M.

Effect of cultivation conditions on the correlation of
components of an antibiotic produced by *Actinomyces violaceus*,
strain no. 719. Dokl. AN SSSR 153 no.5:1195-1198 D '63.
(MIRA 17:1)

1. Institut mikrobiologii AN SSSR.

BEKHTEREVA, M.N.; TARASOVA, N.V.; KHRZHANOVSKAYA, V.E.

Production of alcohols and acids from glycerol by the culture
of *Actinomyces violaceus* strain 719. *Mikrobiologiya* 34 no.5:
773-780 S-0 '65. (MIRA 18:10)

1. Institut mikrobiologii AN SSSR.

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7

IMSHENETSKIY, A.A.; RAUTENSTEYN, Ya.I.; KAZANSKAYA, T.B.; BEKTEREVA, M.N.

Pavel Andreevich Agatov, 1905- ; on his 60th birthday. Mikrobiologiya
34 no.4:749 Jl-Ag '65. (MIRA 18:10)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7"

BEKTEREVA, M.N.; MEDVEDEVA, G.A.; PODLAZOVA, M.N.; SAPOZHNIKOVA, G.A.;
PEOFILOVA, Ye.P.

Rapid method of detecting bacterial infection in culture fluid
during the production of streptomycin. Prikl. biokhim. i
mikrobiol. 1 no. 6:726-730 N-D '65. (MIRA 18:12)

1. Institut mikrobiologii AN SSSR. Submitted Dec. 24, 1964.

SHAPOSHNIKOV, V.N., akademik; BIKHTEREVA, M.N.; TIRASOVA, N.V.; VINOGRADOVA,
N.M.; KHOKHOLOVA, Yu.M.

Organic acids and their role in the formation of prodigiosine-like
pigments in *Actinomyces longisporus rameus* and *Actinomyces*
aurantiocinnamatus. Dokl. AN SSSR 166 no.1x219-222 Ja '66.

(MIRA 19:1)

1. Institut mikrobiologii AN SSSR. Submitted September 13, 1965.

BEKTEREVA, N.P.

BEKTEREVA, N.P.

Physiological mechanism of compensation in cerebral tumors. Zhur.
nevr. i psich. 54 no.6:544-547 Je '54. (MLRA 7:7)

1. Fiziologicheskiy otdel Leningradskogo nauchno-issledovatel'skogo
neurohirurgicheskogo instituta imeni A.L.Polenova.
(BRAIN, neoplasms,
*physiol., compensation mechanism)

BRIGHTSEVA, N.P.

Electrophysiologic characteristics of conditioned reflex processes
in cerebral tumors and tumor-like diseases. Fiziol.zhur. 41 no.2:
187-194 Mr-Ap '55. (MLRA 8:5)

1. Mauchne-isaledovatel'skiy neyrokhirurgicheskiy institut im. A.L.
Pelenova Leningrad.

(REFLEX, CONDITIONED,

EEG of conditioned reactions in cerebral tumors & tumor-
like dis.).

(ELECTROCARDIOGRAPHY, in various diseases,
brain tumor & tumor-like dis., of conditioned reactions)

(BRAIN, neoplasms,

EEG of conditioned reactions in)

BRIKTEREVA, N.P.,; DANOVICH, P.M.

Appearance of slow rhythmic potentials in electroencephalography
in rabbits. Biul. eksp. biol. i med. 41 no.2:3-7 F '56 (MLRA 9:6)

1. Iz Leningradskogo nauchno-issledovatel'skogo neurokhirurgicheskogo
instituta imeni A.L. Polenova (dir.-deystvitel'nyy chlen AMN SSSR
V.N. Shamov) i Voyenno-morskoy meditsinskoy akademii.
Predstavлено deystvitel'nym chlenom AMN SSSR V.M. Shamovym.

(ELECTROENCEPHALOGRAPHY,

rhythmic slow potentials in rabbits, eff. of
irritation by tourniquet & by electricity (Rus))

BEKHTEREVA N.P.

USSR/Human and Animal Physiology - The nervous System.

V-10

Abs Jour : Ref Zhur - Biol., No 2, 1958, 8999

Author : M.M. Livanov, V.M. Anan'ev and N.P. Bekhtereva

Inst :

Title :

A Study of the Bioelectric Mosaics of the Cortex in Patients
with Brain Tumors and Traumas by Means of Electroencephalos-
copy.

Orig Pub : Zhurnal nevropatol. i psichiatrii, 1956, 56, No 10, 778-790

Abstract : The electrical activity of 50 points on the cerebral cortex
was recorded by means of an electroencephaloscope (Livanov,
Anan'ev, Fiziol. zhurnal SSSR, 1955, No 4) on a screen on
which the fluctuations in potential of the corresponding
point were reflected in changes in intensity of illuminat-
tion. The dynamics of the illumination of the points was
recorded with a motion picture camera. When the cerebral
cortex of rabbits was traumatized by the subdural introduc-
tion of a piece of paraffin, there was observed the

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USSR/Human and Animal Physiology - The Nervous System.

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Abs Jour : Ref Zhur - Biol., No 2, 1958, 8999

detected in patients with epilepsy. In patients suffering from the results of trauma to the brain, reduction in the amplitude of potentials was observed in the area of adhesive arachnoiditis, while beyond the focus of injury slow rhythms and foci of local excitation were seen.

Card 3/3

REKHTEREVA, N.P.

Possible forms of intensification of slow fluctuations in an electroencephalogram. Biul. eksp. biol. i med. 43 no.1 supplement: 119-123 '57. (MLRA 10:3)

1. Is Leningradskogo nauchno-issledovatel'skogo neirohirurgicheskogo instituta imeni prof. Palenova (dir. - deyavstvitel'nyy chlen AMN SSSR prof. V.N.Shamov). Predstavlena deyavstvitel'nym chlenom AMN SSSR P.S.Kupalovym.

(ELECTROENCEPHALOGRAPHY

eff. of conditioned reflexes in brain lesion)

(BRAIN, dis.

eff. of conditioned reflex on EEG)

BEKHTEREVA, N. P.

SHAMOV, V. N., BADMAYEV, and BEKHTEREVA, N. P.

"Application of Isotope Encephalography and Electroencephaloscopy
Localization of Brain Tumors."

paper to be presented at 2nd UN Intl. Conf. on the peaceful uses of Atomic
Energy, Geneva, 1 - 13 Sep 58.

AUTHOR:

Bekhtareva, N.P.

SOV/26-58-1-5/36

TITLE:

The Bioelectric Activity of the Human Brain (Bioelektricheskaya aktivnost' golovnogo mozga cheloveka)

PERIODICAL:

Priroda, 1958, Nr 1, pp 32-38 (USSR)

ABSTRACT:

Electric phenomena takes in an essential part of the various manifestations of organs and tissues of the organism. This fact is based on the development of the difference of potentials between an excited section of the tissue and the tissue section that is in a state of rest. As compared with the section at rest, the excited section is electrically negative. While the discharges of the electric organs of electric fish go up to 500 v, the potentials of the human brain reach only millionths parts of one volt. Recently an hypothesis on the role of an intricate structural condition of the living matter in the origin of bioelectric phenomena and the phase changes of this condition under various influences was presented by D.N. Nasonov and V.Ya. Aleksandrov. I.M. Sechenov's theory on the metabolism of substances was further developed by V.Yu. Chagovets. Electric excitations can serve as a reliable indicator of the excitation process itself, its rhythm, intensity and speed. Electron-beam, wave-cycle and

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ink-recording electroencephalographs are the types occurring most frequently. The biopotentials can be led off directly from the skin of the head, from the opened brain and by the method of basal transfers. In animal experiments, biopotentials from deep layers of the brain are lead off by inserting electrodes into the brain at various depths. Normally the basic elements of an electroencephalogram are rhythmic oscillations called alpha and beta waves. This was demonstrated by V.V. Pravdich-Neminskiy (for the dog) and later, by Berger (for man). Based on N.Ye. Vvedenskiy's hypotheses, M.N. Litvanov, N.V. Golikov, V.S. Rusinov, A.B. Kogan, P.I. Gulyayev, V.E. Mayorochik, I.A. Peymer and other researchers demonstrated that the frequency correlations of the electroencephalogram can serve as an indicator of the functional condition of the brain. The hypotheses of these authors confirmed Sechenev's idea that spontaneous discharges are directly connected with the excitability of the brain. The amplitude of the alpha waves oscillates from 20 up to 80 to 10 m kv, but in most cases within the range from 40 to 60 m kv. The beta rhythm is characterized by a frequency from 15 to 30 oscillations a second. Its amplitude usually does not exceed 20 to 30 m kv and is 15 to 20 m kv in most cases. Normally

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the alpha rhythm fades away when sleep comes and, with increasing depth of sleep, changes over into the slower beta rhythm - with a frequency of 1 to 3 oscillations per second - which at first alternates with flashes of 14 to 16 oscillations a second. In cases of sickness, slowing down of the rhythms of the electroencephalogram is observed when conditions are created that favor the development of blocking processes: there appear theta (4 to 6 per second) and beta (1 to 3 per second) waves. Sickness developing together with an intensification of the excitation process shows a dominance of the frequent forms of the rhythm. An electroencephalogram taken under conditions of restricted outside excitations permits an opinion on the appearance of the forms of the bioelectric energy characteristic for disturbance of brain activity. It also indicates their localization. From the very beginning of electroencephalography, records were made of healthy and sick persons in various functional states ranging between rest and high activity and under the influence of drugs. Based on I.P. Pavlov's theories, M.N. Lovanov developed a general scheme of bioelectrical dynamics by the formation of temporary connections. Thus the evaluation of the functional condition of the brain of animals during experiments and of

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patients in hospitals is largely being done by Livanov's reactance curve. This method permits the study of the correlation of the nervous processes from the character of the changes of biopotentials at an increase of power of an especially selected rhythmic exciter. It also makes apparent the various forms of disturbances of the neurodynamics, of the strength and interrelations of the stimulating and blocking processes, etc., and also to better imagine the mechanisms of interaction of the two hemispheres of the brain. The technology of electroencephalography was rendered more efficient by the introduction of microelectrodes and the numerical increase of amplifier canals in the electrographical installations. Also the possibility of observing the change of biopotentials in many brain sections was simultaneously opened. The Soviet researchers M.N. Livanov and V.M. Ananyev have developed a 50-canal device (the electroencephaloscope) for the recording of biopotentials, which surpasses all similar apparatus. It is possible to observe the entire dynamics of a two-way cathode tube. Two images appear simultaneously on the screen: 1) a three-dimensional mosaic of the dynamics of the biopotentials consisting of 50 luminous points which alter their brightness depending on the

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changes of the bioelectric activity led off from the brain, and 2) the numerical importance of the potentials in each point by way of 50 columns with fluctuating amplitudes. Each column corresponds to the magnitude of the potential of a strictly defined point on the first image. These two images of the bioelectric constellation of the brain are recorded by way of cinephotography. In the clinic of the Leningrad Neurosurgical Institute imeni A.A. Polenov, the use of the electroencephaloscope has made it possible to define more accurately the areas of changed brain activity in cases of certain brain tumors and traumata. Not only is the clinical use of this device highly promising, but also its scientific utilization in research on the higher nervous activity of man and the study of the nature of the electrical processes of the brain. There are 3 photos, 1 diagram, and 1 Soviet reference.

ASSOCIATION: Leningradskiy nauchno-issledovatel'skiy neyrokhirurgicheskiy institut im. A.L. Polenova (Leningrad Scientific Neurosurgical Research Institute imeni A.L. Polenov)

Card 5/5

BEKETTEREVA, N. P., Doc Med Sci (diss) -- "On the bioelectric activity of the cerebral hemispheres in cases of supratentorial tumors". Leningrad, 1959. 30 pp
(Inst of Experimental Med of the Acad Med Sci USSR, Leningrad Sci Res Neurosurgical Inst im Prof A. L. Polenov, Pathophysiological Lab), 200 copies (KL, No 22, 1959, 122)

I. BEKH TEREVA, N.P.

S2(N) 37(0)

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International Conference on the Peaceful Uses of Atomic Energy. 2d, Geneva, 1950
 Biology and health radiobiology. I. radiobiology and radiation medicine
 (Abstracts of Soviet scientists; Radiobiology and Radiation Medicine)
 Moscow, 2nd ed. Gost, op. no. 1950, pp. 1-1000, 1950. 450 p. 0,000 copies printed. (Series:
 Physics, Mathematics, Medicine) International Conference on atomic energy control.
 Study, Vol. 9)

General Ed. A.Y. Zhdanov, Corresponding Member USSR Academy of Medical Sciences. Ed. L.B. Shishchenko, Doctor Sci. Med. Tech. Acad. Med.

Contents: This book is intended for physicians, scientists, and students of radiobiology as well as for producers and students of various types of radiation and radioactive materials.

CONTENTS: This is Volume 2 of a collection of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy, held on September 2-13, 1950, in Geneva. Volume 3 contains 20 reports collected by Comittee of Medical Sciences R.F. Ministry of Health. The reports cover problems of the biological effects of ionizing radiation. Below are some of radiation's main direct genetic effects of radiation, treatment of radiation diseases, uses of radioactive isotopes in medical and biological research, uses of atomic energy for diagnosis and therapeutic purposes, soil chemistry of strontium-90 and strontium-89 products, their uptake by plants, and their storage in plants and foodstuffs. References, summary and report.

Reports of Soviet Scientists (Cont.)

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 Shishchenko, L.V., Special Features of Alkaline Synthesis in the Plant and Animal Cell (Report No. 2064) 217
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 Shishchenko, L.V. Effect of Various Factors on the Biosynthesis of Strontium-90 in the Human Cell (Report No. 2075) 121
 Shishchenko, L.V., V.N. Kostylev, and T.V. Goryainova. Radioisotope Synthesis in the Human Cell. I. Strontium-90 and Strontium-89 Synthesis in the Human Cell (Report No. 2050) 102
 Shishchenko, L.V., Being able and able to Study Strontium-90 Metabolism (Report No. 2030) 172
 Shishchenko, L.V. Relative Characteristics of the Three Phorbol Esters Cytoskeletal Proteins of the Ovary (Report No. 2051) 11
 Shishchenko, L.V., Promotional and 5'-GMP, Chalopogenine (Compounds) in the Ovary (Report No. 2076) 201
 Shishchenko, L.V., and M. M. Slobodchikova. Studies on the Crisis for Diagnostic and Therapeutic Purposes (Report No. 2065) 206
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 Shishchenko, L.V., L.A. Slobodchikova, L.P. Matogina, V.G. Shishchenko, and T.S. Slobodchikova. Methods of Using Isotopes in the Production of Substances in the Ovary (Report No. 2071) 219
 Shishchenko, L.V., L.A. Slobodchikova, and L.P. Matogina. Synthesis of Heterocyclic Compounds and Their Use in Medicine (Report No. 2010) 246

cont. 67

BEKHTEREVA, N.P.; USOV, V.V.

Method for interrupted photo stimulation at the rhythm of natural
brain potentials registered by electroencephalography. Fiziol.
zhur. 46 no.1:108-111 Ja '60. (MIRA 13:5)

1. From the department of pathophysiology of the A.L. Polenov
Neuro-Surgical Institute, Leningrad.
(ELECTROENCEPHALOGRAPHY)
(LIGHT)
(BRAIN physiol.)

BEKTEREVA, Natal'ya Petrovna; ABRAKOV, L.V., red.; RUILOVA, M.S., tekhn.
red.

[Biopotentials of the cerebrum in supratentorial tumors] Biopoten
tsialy bol'shikh polusharii golovnogo mozga pri supratentorial'nykh
opukholiakh. Leningrad, Gos. izd-vo med. lit-ry Medgiz, 1960. 186 p.
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(ELECTROENCEPHALOGRAPHY)

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Summation of the inhibition process. Fiziol. zhur. 46 no. 5:509-
515 My '60. (MIRA 13:12)

1. From Polenov Research Neurosurgical Institute, Leningrad.
(INHIBITION)

UGRYUMOV, V.M., prof., otv. red.; BEKTEREVA, N.P., doktor med. nauk, red.; VOLKOV, A.I., red.; DOLGOPOLOVA, G.A., red.; NIKIFOROV, B.M., red.; RACHKOV, B.M., red.; RASTORGUYEV, A.V., red.; TELEGINA, A.A., red.; YATSUK, S.L., red.; LEVIN, M.V., tekhn. red.

[Proceedings of the Fourth Joint Scientific Conference of Young Neurosurgeons] Chetvertaya ob"edinennaya nauchnaia konferentsia molodykh neirokhirurgov, trudy. Leningrad. Medgiz. 1961. 414 p. (MIRA 15:6)

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(NERVOUS SYSTEM--SURGERY)

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Activities of electrophysiological laboratories in England;
personal impressions. Fiziol. zhur. 47 no.4:528-531 Ap '61.
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Significance of the use of different types of interrupted light stimulation in registering the electroencephalogram in brain tumors. Zhur. nevr. i psikh. 61 no.11:1608-1614 '61. (MirA 15:2)

1. Patofiziologicheskaya laboratoriya (zav. .. prof. N.V.Zimkin)
Leningradskogo nauchno-issledovatel'skogo neurokhirurgicheskogo
instituta imeni A.L.Polenova (dir. - prof. V.N.Shamov),
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(LIGHT PHYSIOLOGICAL EFFECT)

BEKHTEREVA, N.P. (Leningrad)

Fifth International Congress on Electroencephalography and Clinical
Neurophysiology. Fiziol. zhur. 48 no.2;227-232 F '62. (MIRA 15:2)
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Role of neuroplegic substances in the prevention of "tourniquet" shock; according to electroencephalographic data. Eksper. khir. i anest. no.2:66-70 '62. (MIRA 15:6)

1. Iz Leningradskogo nauchno-issledovatel'skogo neyrokhirurgicheskogo instituta imeni A. L. Polenova (dir. - prof. V. N. Shamov) i kliniki voyenno-morskoy khirurgii (nach. - prof. A. A. Bocharov) Voyenno-meditsinskoy ordena Lenina akademii imeni S. M. Kirova.

(SHOCK) (ELECTROENCEPHALOGRAPHY)
(AUTONOMIC DRUGS)

BEKHTEREVA, N. P., doktor med. nauk; STEPANOVA, T. S. (Leningrad)

Dynamics of bioelectrical activity during the process of dark adaptation and during drowsiness in patients with focal diseases of the brain. Vop. neirokhirurgii no.3:1-6 '62.
(MIRA 15:7)

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(ELECTROENCEPHALOGRAPHY) (BRAIN-TUMORS)
(EYE-ACCOMODATION AND REFRACTION)
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BEKINTEREVA N.P., prof.; USOV V.V., prof.

Some aspects of the use of electroencephalography in medical
scientific institutions of the R.S.F.S.R. Biul. Uch. med. sov.
3 no.4:14-20 Jl-Ag '62. (MIRA 17:8)

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Some electroencephalographic problems in neurosurgical and
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KRATIN, Yuri Gennadiyevich; BEKHTEREEVA, Nataliya Petrovna;
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Aleksandrovich; SENICHENKOV, Boris Tikhonovich; USOV,
Vladimir Vasil'yevich; KATINAS, G.S., red.izd-va;
ZAMARAYEVA, R.A., tekhn. red.

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BEKHTEREVA, N.P. (Leningrad)

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(MIRA 18:2)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7"

BEKTEREVA, N.P.; STEPANOVA, T.S.

Dynamics of the focus of pathological activity in brain tumors under conditions of prolonged limitation of external stimulants and of sleep. Zhur. nevr. i psikh. 64 no. 12:1753-1758 '64. (MIRA 18:1)

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BEKHTEREVA, V. N.

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SO: U-4934, 29 Oct. 53, (Letopis 'Zhurnal 'nykh Stately, No. 16, 1949).

Bekhterev, V.N.

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Resorts and Physical Therapy. Vop.kur., fizioter. i lech.fiz.kul't.
22 no.5:93-94 S-0 '57. (MIRA 11:2)

1. Uchenyy sekretar'Uzbekskogo nauchno-issledovatel'skogo
instituta kurortologii i fizioterapii imeni N.S.Semashko
(PHYSICAL THERAPY)

BENKTEREVA, V.N., kand.med.nauk

On the history of the development of exercise therapy in the
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8 '58. (MIRA 13:6)

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dotsent Y.K. Muminov).

(EXERCISE THERAPY) (AVICENNA, 980?-1057)

BEKTEREVA, V.N., kand.med.nauk

Exercise therapy in nonspecific diseases of the respiratory organs at the health resorts and sanatoriums of Uzbekistan.
Sbor.trud.Uz.gos.nauch.-issl.inst.kur.i fizioter. 17:163-167
'62. (MIRA 17:7)

BEKHTEREEVA, Ye.I. (Moscow).

Sports injuries and their prevention. Fel'd.i akush. no.12:10-15
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(MLRA 6:12)
(Sports--Accidents and injuries)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7

BEKTEREVA, Ye.I. (Moscow).

Hemarthrosis. Fel'd.i akush. no.1:23-25 Ja '54.

(MLRA 7:1)
(Hemorrhage)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7"

BEKHTEREVA, YE, I. (Moskva)

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Blood transfusion and infusion of blood substitutes by the drip
method. Fel'd. i skush. no.1:46-49 Ja '55. (MIRA 8:3)

(BLOOD TRANSFUSION,

drip)

(INFUSION, PARENTERAL,

drip)

BEKHTEREVA, Ye.I. (Moskva)

Apparent death. Fel'd.i akush. no.5:9-14 My '55.

(MLRA 8:7)

(DEATH,

apparent, resuscitation)

(RESUSCITATION,

in apparent death)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7

BEKTEREVA, Ye. I.

Traumatism in athletics and its prevention. Feldsher & akush.
no.12:10-15 Dec 1953. (CLML 25:5)

I. Moscow.

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7"

BRECHTSEVA, Ye. I. (Moskva).

Gastric hemorrhages. Vel'd. i akush. 22 no. 4:14-18 Ap '57.
(HEMORRHAGE) (STOMACH-DISEASES) (MIRA 10:6)

BERKTEREVA, Ia. I. (Moskva)

Observations on the cardiovascular system during operations. Fel'd
s'eznach. 22 no. 6:9-12 June '57. (MIRA 12:3)
(CARDIOVASCULAR SYSTEM) (SURGERY, OPERATIVE)

BEKINTERVA, Ye. I., Cand Med Sci —(diss) "On the problem of hemo-
dynamics in major surgical interventions ^{on} the organs of the abdominal
cavity." ^{Med} Mos, 1953. 14 pp (First Order of Lenin Med Inst in I. M. Sech-
nov), 200 copies (KL,44-58, 125)

-67-

EACERPTA MEDICA Sec 9 Vol 13/3 Surgery Mar 59

1541. (426) THE DCSAGE OF FLUID IN MASSIVE DRIP INFUSIONS (Russian text) -
Bekhtereva, V. I. - KHIRURGIYA 1958, 4 (66-89) Tables 2
The effect of large amounts of fluid on the cardiovascular system was studied in 105 patients during operations and the postoperative period. It was established that haemodynamic indices are changed by the infusion of fluid and blood transfusion. The compensatory mechanisms of the cardiovascular system are weakened during the surgical operation and this system becomes less stable to various interventions, particularly to the i.v. drip which may bring about overstrain of the cardiovascular system. According to the author 400 to 700 ml. of fluid during the operation and 1,500 to 3,000 ml. of fluid in the postoperative period are doses which do not cause any haemodynamic changes.

SOV/137-58-10-20708

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 53 (USSR)

AUTHOR: Bekhtev, G.I.

TITLE: Condition and Operation of Dust-removal Equipment at the Calcination Department of the Urals Order-of-Lenin Aluminum Plant (Sostoyaniye i rabota pyleulavlivayushchikh ustyanovok tsekha kal'tsinatsii Ural'skogo ordena Lenina alumininiyevogo zavoda)

PERIODICAL: Sb. materialov po pyleulavlivaniyu v tsvetn. metallurgii, Moscow, Metallurgizdat, 1957, pp 197-201

ABSTRACT: Removal of dust from the calcination furnaces at the UAP is by a separate installation at each furnace. Each installation, consisting of 3 components, receives 24-25,000 nm³/hr of gases, the temperatures of which are 280-340°C on exit from the furnace. The dust contents of the gases at the intake of the 1st and 2nd gas-cleaning units (GC) is 180-240 g/nm³, while on entry to the 3rd component of the GC it is 500-570 g/nm³. The 1st component of the GC consists of 2 stages of cleaning: A multicyclone (MC), model TsG-1, with 70 250-mm-diam elements, the efficiency of the MC being 78-80%, and, for the

Card 1/2

SOV/137-58-10-20708

Condition and Operation of Dust-removal Equipment (cont.)

2nd stage, a horizontal Ts-14 electrostatic precipitator. The total efficiency of the 1st unit of the GC is 99.7-99.8%. The 2nd unit of the GC contains 4 stages of cleaning: The 1st stage is the cold head of a furnace with a dust chamber, the 2nd stage is a TsG-1 MC with 84 250-mm elements, and the 3rd stage a TsG-1 MTs with 70 250-mm elements, the 4th stage being a scrubber. The total efficiency of the GC is 99.5%, but the installation is uneconomical in operation. The 3rd unit of the GC contains 4 cleaning stages: Stage 1 is analogous to that of the 2nd GC; stage 2 is a MC with 70 250-mm diam elements; and stage 3 is a MC with 180 150-mm diam elements. Both MC are mounted together in a common housing. The 4th stage is a vertical electrostatic precipitator with an active area of 29.2 m². This system (consisting of two MC in series and an electrostatic precipitator) is the best for the cleaning of calcination-furnace gases. Vertical electrostatic precipitators are inferior to horizontal ones in various ways: Difficulty of manufacture, repair, etc. The hot dry alumina dust passes from the gas cleaners to ejection-type pneumatic pumps in worm mixers for blending with moist hydrate before charging into the furnace. The consumption of compressed air at 4 atm remains at 25-30 m³ per t dust when the height of lift is ~14 m.

1. Furnaces--Operation 2. Furnaces--Maintenance 3. Particles G.G.
Card 2/2 (Airborne)--Cleaning 4. Electrostatic precipitators--Performance

YUZHANINOV, I.A.; TELYATNIKOV, G.V.; BEKHTEV, G.I.; KNYAZEV, A.T.;
KOROLEVA, A.A.

Testing a three-chamber fluidized bed cooler for the cooling of
alumina. TSvet. met. 36 no.6:50-55 Je '63. (MIRA 16:7)

(Fluidization-Cooling)
(Aluminum oxide-Cooling)

RECHTEYeva, L. I. (Leningrad)

Observations on the action of a preparation Rauwolfia serpentina Benth (raupina) in hypertension. Klin.med. 34 no.6:46-52 Je '56.
(MIRA 9:10)

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(HYPERTENSION, therapy.)

Rauwolfia alkaloids (Rus))

(RAUWOLFIA ALKALOIDS, therapeutic use,
hypertension (Rus))

SMIRNOVA, I.S., kand.tekhn.nauk; BAKHIREV, N.F., inzh.; KACHUROVA, K.P., zootehnik; KUTSEMKO, V.V., inzh.; BEKHTIN, B.I., inzh.; SVEN-TETSKIY, I.I., inzh.; KISHECHNIKOV, S.A., inzh.; YEVREINOV, M.G., red.

[Ultraviolet irradiation of farm animals and poultry; a manual]
Ul'trafioletovoe obluchenie sel'skokhoziastvennykh zhivotnykh
i ptits; rukovodstvo. Moskva, Otdel tekhn.informatsii VIESKha,
1959. 34 p.
(MIRA 13:6)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
elektrifikatsii sel'skogo khozyaystva. 2. Deystvitel'nyy chlen
Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.
Lenina (VASKHNIL) (for Yevreinov).
(Ultraviolet rays--Therapeutic use) (Veterinary hygiene)

BENKTIN, B. I.

Electric circuits of mechanized installations for ultraviolet
irradiation of farm animals in barns. Sbor. nauch.-tekhn. inform.
po elek. sel'khoz. no.7:22-25 '59. (MIRA 13:9)
(Ultraviolet rays—Therapeutic use)

BKHTIN, B. I.; SVENTITSKIY, I. I.

Starterless circuit for turning on EUV low-pressure gas-discharge lamps with active ballast in the form of incandescent lamps. Sbor. nauch.-tekhn. inform. po elek. sel'khoz. no.7:25-28 '59.
(MIRA 13:9)

(Electric discharge lighting)

I
HECHTIN, B., inzh.; SVENITITSKIY, I., inzh.

Ultraviolet rays in agriculture. Mauka i perek. op. v
sel'khoz. 9 no.2:49-52 F '59. (MIRA 12:3)
(Ultraviolet rays)

"APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7

BEKETIN, B.I.

Group switching circuit for PRK bulbs with universal choke.
Sbor. nauch.-tekhn. inform. po elek. sel'khoz. no.6:17-19 '59.

(MIRA 13:9)
(Electric lamps)

APPROVED FOR RELEASE: 06/06/2000

CIA-RDP86-00513R000204210014-7"

BEKHTIN, D.

KOVALENKO, F.; LEVITOV, A.; BEKHTIN, D.;

Simplification of the technological control apparatus at enterprises. Sots.trud no.8:162-109 Ag '57. (MLRA 10:9)

1. Direktor L'vovskoy obuvnoy fabriki No.3 (for Kovaleenko).
2. Inzhener zavoda "Avtoarmatura" (for Levitov). 3. Direktor fabriki "Vozrozhdeniye" (for Bekhtin).
(Production control)

BANDIN, I.; BEILOV, R.; BEKHTIN, N.; BOYKO, V.; BORISOV, A.; BYCHKOV, V.;
VASILENKO, S.; VINOGRADOV, V.; VISHNEVSKIY, A.; VODNEV, G.; DVORIN,
S.; DZHAPARIDZE, Ye.; DUDENKO, V.; D'YAKOV, N.; ZHURAVLEV, S.;
ZAKHAROV, A.; IVANOV, I.; KIRSANOV, M.; KOLYADA, G.; KOROBOV, P.;
LESKOV, A.; LUKICH, L.; LYUBIMOV, A.; MOLIASHKIN, S.; MYRTSYMOV, A.;
PERTSEV, M.; PETRUSHA, F.; PITERSKIY, A.; POPOV, I.; RAYZER, D.;
ROZHKOV, A.; SAPOZHNIKOV, L.; SHDOV, P.; SOKOLOV, P.; TEVOSYAN, I.;
TIKHONOV, N.; TISHCHENKO, S.; FILIPPOV, B.; FOMENTKO, N.; SHELKOV,
A.; SHERemet'yev, A.

Fedor Aleksandrovich Merkulov. Koks i zhim.no.7:62 '56. (MLRA 9:12)
(Merkulov, Fedor Aleksandrovich, 1900-1956)

MALENKOV, G.M.; PERVUKHIN, M.G.; KUCHERENKO, V.A.; ZHIMERIN, D.G.; LOGINOV, P.G.; PAVLENKO, A.S.; YERMAKOV, V.S.; VINTER, A.V.; DMITRIEV, I.I.; UGORETS, I.I.; BEKHTIN, N.V.; VOZNESENSKIY, A.N.; VASILENKO, P.I.; BOROVAY, A.A.; NOSOV, R.P.; KRISTOV, V.S.; BELYAKOV, A.A.; RUSSO, G.A.; VASIL'YEV, A.Y.; RUMKIN, V.P.; TIRMAN, I.A.; ORLOV, G.M.; CHUMACHENKO, N.A.; BESCHINSKIY, A.A.; YAROSH, V.F.

Pavel Pavlovich Laupman; obituary. Gidr. stroi. 26 no.5:62 My '57.
(Laupman, Pavel Pavlovich, 1887-1957) (MIRA 10:6)

NESMEYANOV, A.N.; LOBANOV, P.P.; BAKULEV, A.N., laureat Leninskoy premii;
BEKHTIN, N.V.; KAIROV, I.A.

Presidents of five academies greet you. Tekh. mol. 25 no.7:2-3
Jl '57.
(MIRA 10:8)

1. President Akademii nauk SSSR (for Nesmeyanov). 2. President
Vsesoyusnoy Akademii sel'skokhozyaystvennykh nauk imeni V.I.
Lenina (for Lobanov). 3. President Akademii meditsinskikh nauk
SSSR (for Bakulev). 4. President Akademii pedagogicheskikh nauk
RSFSR (for Kairov). 5. President Akademii stroitel'stva i arkhi-
tekturny SSSR (for Bekhtin).

(Youth--Congresses)

BEKHTINA, V. G.

USSR/General Biology. Individual Development.

B-4

Abs Jour: Ref. Zh.-Biol., No 9, 1957, 35100

Author : Bekhtina, V.G.

Inst :

Title : Some Data Concerning the Fecundation and Beginning Stages of Embryonic Development in Chickens.

Orig Pub: Tr. Pushkinsk. n.-i. laborat. razvedeniya s.-kh. zhivotnykh, 1955, vyp. 7, 198-201

Abstract: In eggs up to ovulation there is a nucleus the membrane of which disappears at the moment of ovulation. For 1-2 hours after ovulation the author could not detect in the egg the elements of the nucleus. The author cites the great technical difficulties which evidently prevented him from seeing the structure of the nucleus at this stage. The moment of the sperm and egg nuclei merging is described as are the mitotic figures of the first splittings.

Card : 1/1

-1-

BEKHTINA, V.G., Cand Agr Sci -- (diss) "Maturation
of the egg cell, fertilization, and ~~the~~ early stages of
embryonic development of ^{chicken} ~~hens~~." Len, 1958, 17 pp
(Min of Agr USSR. Len Agr Inst) 200 copies
(KL, 29-58, 134)

- 81 -

~~BENETINA V.G.~~ (Pushkin, Pushkinskaya ul., d. 16, kv.2)

Morphological characteristics of fertilization in hens [with summary in English]. Arkh.anat.gist. i embr. 35 no.1:92-100 Ja-F '58. (MIRA 11:4)

1. Iz kafedry razvedeniya sel'skokhozyaystvennykh zhivotnykh Leningradskogo sel'skokhozyaystvennogo instituta i Pushkinskoy nauchno-issledovatel'skoy laboratorii razvedeniya sel'skokhozyaystvennykh zhivotnykh (dir. - prof. M.M.Lebedev)

(FERTILIZATION

morphol. aspects in chicks (Rus))

BEKHTINA, V.G.

Early stages of cleavage in the chick embryo. Arkh.anat.gist.i
embr. 38 no.4:77-85 Ap '60. (MIRA 14:5)

1. Pushkinskaya nauchno-issledovatel'skaya laboratoriya razvedeniya
sel'skokhozyaystvennykh zhivotnykh (zav. - prof. M.M.Lebedev).
Adres avtora: Leningrad, g. Pushkin, Akademicheskiy pr. 22,
Pushkinskaya nauchno-issledovatel'skaya laboratoriya razvedeniya
sel'skokhozyaystvennykh zhivotnykh.
(EMBRYOLOGY—BIRDS)

BEKHTINA, V.G. (g. Pushkin, Moskovskoye shosse, 2,kv.18); ZEMTSOVA, Z.D.
(Leningrad, K-100, Kantemirovskaya ul.,28,kv.22)

"Development of the embryo of the domestic chicken and its correlation
with the yolk and membranes of the egg (with tables of the consecutive
stages in its development)" by M.N.Ragozina. Reviewed by V.G.Bekhtina
and Z.D.Zemtsova. Arkh. anat. i embr. 42 no.1:117-120 Ja '62.

(MIRA 15:4)

(POULTRY) (EMBRYOLOGY--GALLINAE)

BEKHTINA, V.G.; DYAGILEVA, G.Ye.

Fate of spermatozoids in the genital tract of hens. Arkh.anat.,
gist. i embr. 46 no.5:25-32 My '64. (MIRA 18:2)

1. Pushkinskaya nauchno-issledovatel'skaya laboratoriya razvedeniya
sel'skokhozyaystvennykh zhivotnykh i kafedra razvedeniya sel'-
skokhozyaystvennykh zhivotnykh (zav. - prof. M.M.Lebedev)
Leningradskogo sel'skokhozyaystvennogo instituta. Adres avtorov:
Leningrad, Pushkin, Akademicheskiy prospekt 22, Laboratoriya
razvedeniya sel'skokhozyaystvennykh zhivotnykh.

ACC NR: AP6035751

SOURCE CODE: UR/0413/66/000/019/0121/0121

INVENTOR: Batrakov, V. P. Azhogin, F. F.; Pribylova, L. I.; Kalugina, Z. V.; Bekhtina, Z. P.

ORG: none

TITLE: Phosphatizing of cadmium-plated and zinc-plated steel surfaces. Class 48,
No. 186828

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 19, 1966, 121

TOPIC TAGS: phosphatizing, steel, ~~plating~~, cadmium ^{plating}, ~~plated steel~~, phosphatizing, zinc plating, ~~steel phosphatizing~~, metal plating

ABSTRACT: This Author Certificate introduces a method of phosphatizing cadmium-plated or zinc-plated steel surfaces by treatment in a solution containing zinc monophosphate, magnesium nitrate and zinc oxalate. To obtain fine-grained phosphate films on parts with a complex configuration and a varying degree of surface finish, the composition of the solution is set as follows (in g/l): 10—15 zinc monophosphate, 50—70 magnesium nitrate, 10—15 ammonium monophosphate, 1.7—2.0 ferric nitrate, 1.7—2.0 oxalic acid, 4 ml/l "Progress" detergent and zinc oxalate, the latter up to saturation point. The process is carried out at 70—85°.

SUB CODE: 13/ SUBM DATE: 27May64/

Card 1/1

UDC: 621.794.62:669.14

BEKHTLE, G.A.; GRITSAYENKO, A.I.; D'YAKOVA, M.K.; ZHAROVA, M.N.

Using semicoke tars from Cheremkhovo coals for the flotation of iron
ores. Zhur.pril.khim. 34 no.10:2332-2337 O '61. (MIRA 14:11)

1. Institut goryuchikh iskopayemykh AN SSSR i filial Instituta
gornogo dela AN SSSR na Kurskoy Magnitnoy anomalii.
(Coal tar) -(Iron ores)

BEKETILE, G.A.

BASITOVA, S.M.; DAVYDOVSKAYA, R.M.; BEKETILE, G.A.

Determining the vapor tension of molybdenum and rhenium chlorides.
Izv. Otd. est.nauk AN Tadzh. SSR no.23:35-39 '57. (MIRA 11:8)

1. Institut khimii AN Tadzhikskoy SSR.

(Molybdenum chlorides) (Rhenium chlorides)

SOV/127-58-11-7/16

AUTHORS: Bekhtle, G.A. and Silishchenskaya N.M. Candidates of Technical Sciences, Glembotskiy, V.A., Professor, Plaksin, I.N., Member-Correspondent of the AS USSR, Yefimov, V.P. and Rumyantseva, N.M., Engineers, and Korolev, V.A., Research Worker

TITLE: The Flotation of Iron Minerals from Magnetic Separation Tailings of the Concentration Plant of the KMAruda Kombinat (Flotatsiya zheleznykh mineralov iz khvostov magnitnoy separatsii obogatitel'noy fabriki kombinata KMAruda)

PERIODICAL: Gornyy zhurnal, 1958, Nr 11, pp 28 - 31 (USSR)

ABSTRACT: About 800,000 tons of iron are lost each year in tailings on the Krivorozhskiy yuzhnnyy gorno-obogatitel'nyy kombinat (Krivoy Rog Southern Concentration Plant) alone when the concentration of iron ore is done by magnetic separation. To reduce these losses, the Mekhanobr Institute long ago proposed the flotation method to extract the iron from the tailings. But the lack of an effective and inexpensive flotation reagent prevented the introduction of this method. Late-ly, the branch of the Institute of Mining of the AS USSR at the Kursk Magnetic Anomaly, in collaboration with the Tsentral'nyy nauchno-issledovatel'nyy institut (Central Scientific Research Institute) of the Lesokhimicheskaya promyshlennost'

Card 1/3

SOV/127-58-11-7/16

The Flotation of Iron Minerals from Magnetic Separation Tailings of the Concentration Plant of the KMAruda Kombinat

(Chemical Wood Pulp Industry)(TsNILKhI) tested a new flotation reagent. This reagent is the heavy fraction of the distillation of the gas-generating resin obtained in the process of wood gasification. A similar product, called Vetluga Oil, is being prepared at the Vetluzhskiy lesokhimicheskiy kombinat (Vetluga Chemical Wood Pulp Kombinat). Vetluga oil has the following characteristics: acid number - 26.9, the fraction output at temperatures up to 240°C including water - 13% of volume. It contains about 40% of high molecular phenols and their derivatives. Laboratory tests made with the tailings of ores from the KMAruda Kombinat showed that with the use of water glass as depressor and Vetluga oil as a flotation reagent, a concentrate containing 44-49% of iron was obtained. As a result of these tests, a scheme of tailing flotation was developed (Figure 5) and industrially tested in the flotation mill in Gubkin, which reprocesses the tailing of the magnetic separation. The 3 months of tests showed the possibility to obtain on an industrial scale a flotation concentrate containing 48-52% of iron. Vetluga oil was used as a collector-frother in a proportion of 600 gr/ton and the mixture of water glass and aluminum sulfate

Card 2/3

SOV/127-58-11-7/16

The Flotation of Iron Minerals from Magnetic Separation Tailings of the Concentration Plant of the KMAruda Kombinat

in a proportion of 6 : 1 was used a depressor. The equipment scheme of the mill consisted of: 3 hydrocyclones IGD-300, 1 spiral classifier and 2 flotation machines M-5 with 10 compartments each. There are 2 tables, 4 graphs, 1 flow-chart and 2 Soviet references.

Card 3/3

1. Iron--Recovery

BIEKHTLE, G.A.

Chlorination of calcium tungstate and iron tungstate by a mixture of chlorine and sulfur chlorides. Trudy AN Tadzh. SSR 84:3-9 '59.

(MIR 13:3)

(Calcium tungstate) (Iron tungstate) (Chlorination)

BEKHTE, G.A.

Effect of the composition of the gas phase on the process of chlorinating calcium tungstate with chlorine saturated with sulfur chlorides. Trudy AN Tadzh. SSR 84:11-16 '59.

(MIRA 13:3)

(Calcium tungstate) (Chlorination)

GLUKHOV, I.A.; BEKHTLE, G.A.

Chlorination reaction of molybdenite. Trudy AN Tadzh. SSR 84:17-33
'59. (MIRA 13:3)
(Molybdenite) (Chlorination)

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SOV/81-59-5-14687

5.2600

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 5, p 69 (USSR)

AUTHORS: Glukhov, I.A., Bekhtle, G.A.

TITLE: Oxidizing Chlorination of Molybdenite
1959

PERIODICAL: Tr. AS TadzhSSR, 1958, Vol 84, pp 35 - 46

ABSTRACT: The chlorination of molybdenite in the presence of O₂ takes place more rapidly, than in an atmosphere of pure Cl; whereby the products of sublimation are the highly volatile oxychlorides, mainly molybdenum di-oxydichloride, MoO₂Cl₂. With a reduced supply of O₂ during oxidizing chlorination, highly volatile molybdenum oxychlorides are formed, having the lowest degree of oxidability, apparently mainly oxy-tetrachloride MoOCl₄ and molybdenum oxytrichloride, MoOCl₃. The presence of moisture, within the limits of atmospheric humidity, is not detrimental to the main process. An elevated humidity promotes the formation of low-volatile MoO₃, as a result of thermal dissociation of the dioxychloride monohydrate formed MoO₂Cl₂.H₂O. Upon the formation of oxychlorides from molybdenite, during the oxidizing chlorination,

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Card 1/2